

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Catherine Wyffels, Environmental Engineer

DATE: May 6, 2020

SUBJECT: PROPOSE FOR PUBLIC COMMENT: R307-410-4. Permits: Emissions Impact Analysis. Modeling of Criteria Pollutant Impacts in Attainment Areas.

The Division of Air Quality (DAQ) is proposing a revision to R307-410-4. *Permits: Emissions Impact Analysis. Modeling of Criteria Pollutant Impacts in Attainment Areas* to add a PM_{2.5} modeling threshold for attainment areas.

The PM_{2.5} modeling threshold has been added to Table 1 in section R307-410-4. The proposed modeling threshold of 10 tons per year (tpy) is the PM_{2.5} significant emission rate (SER) for direct emissions of primary PM_{2.5} established by EPA in 40 CFR 51.166(b)(23).

Under the Prevention of Significant Deterioration (PSD) program in 40 CFR 51.166, SERs are established for each criteria pollutant to determine whether a modification is considered significant and subject to PSD review. Although SERs are used for PSD applicability purposes, DAQ uses SERs as the modeling threshold for both major and minor sources. The modeling thresholds for all pollutants in Table 1 of R307-410-4 are the SERs in 40 CFR 51.166, except for the threshold for PM₁₀ for fugitive dust and fugitive emissions. R307-410 requires that a modification or a new source with a potential to emit amounts exceeding the thresholds in Table 1 conduct air quality modeling to evaluate the source's impact on the National Ambient Air Quality Standards (NAAQS).

The proposed revision to R307-410 adds the PM_{2.5} SER as the PM_{2.5} modeling threshold. This threshold will apply to both major and minor sources in attainment areas.

This revision is being done in anticipation of the attainment designation of the PM_{2.5} nonattainment areas. While an area is in nonattainment for a NAAQS, the nonattainment new source review (NNSR) permitting program applies. The NNSR program is intended to allow the construction of new and modified sources while requiring more strict emission controls and emission offsetting. However, under NNSR, modeling is not conducted for the pollutant for which the area is nonattainment because the background concentration in the area is already exceeding the NAAQS. When an area is designated attainment, modeling is an important part of the New Source Review (NSR) program to ensure that a modification or new source will not cause or contribute to a violation of the NAAQS. DAQ wants to ensure that the appropriate requirements are in place for evaluating the impact of a new source or modification after the redesignation of the PM_{2.5} nonattainment areas.

The current amendment adding a PM_{2.5} modeling threshold is to address the pending PM_{2.5} attainment designation. Future rulemaking may require additional modifications to R307-410, specifically with the inclusion of NO₂ and Ozone requirements.

In addition, DAQ is correcting the terminology for the non-fugitive PM₁₀ modeling threshold. The previous language included the term “non-fugitive dust,” which is not defined in the Utah administrative rules and is technically incorrect.

Staff Recommendation: Staff recommends that the Board propose for public comment R307-410-4 Permits: Emissions Impact Analysis. Modeling of Criteria Pollutant Impacts in Attainment Areas.